

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte WON BANG, YEN KUN WANG, and YEH JEN

KAO

MAILED

Appeal No. 2005-0786
Application No. 09/832,168

ON BRIEF

MAR 23 2005
PAT. & T.M. OFFICE
BOARD OF PATENT APPEALS
AND INTERFERENCES

Before CAROFF, JEFFREY T. SMITH, and PAWLIKOWSKI, Administrative Patent Judges.

CAROFF, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the examiner's final rejection of claims 1-11 and 17-21. Claims 12-16, all the other claims in appellants' application, stand withdrawn from further consideration, pursuant to 37 CFR § 1.142(b), as being drawn to a non-elected invention and, thus, are not before us.

The claims on appeal relate to an apparatus for delivering process gas from a vaporizer to a processing system. According

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to appellants' specification, the claimed apparatus can be used in the production of integrated circuits to provide controlled delivery of vapor to a chemical vapor deposition (CVD) chamber.

Claim 1, which is one of three independent claims, is illustrative of the claimed invention:

1. An apparatus for delivering processing gas from a vaporizer to a processing system, comprising:

a valve connected between the vaporizer and the processing system, the valve having a valve input connected to a vaporizer output and a first valve output connected to a processing system input and a second valve output connected to a bypass line; and

a controller for switching the valve between the first valve output and the second valve output.

The prior art references relied upon by the examiner are:

| | | |
|----------|-----------|---------------|
| Gauthier | 6,007,330 | Dec. 28, 1999 |
| King | 4,263,091 | Apr. 21, 1981 |

Claims 1-11 and 17-21 stand rejected under 35 U.S.C. § 103 as being obvious from the combined teachings of Gauthier and King.

Based on the record before us, we agree with appellants that the examiner has failed to establish a prima facie case of obviousness. Accordingly, we reverse the rejection at issue essentially for the reasons set forth in appellants' brief and reply brief.

For emphasis, we note that the teachings of Gauthier are crucial to the rejection at issue. However, as explained by appellants, the instant claims distinguish over Gauthier by requiring use of a valve which has one input and two outputs for alternatively feeding vapor to a processing system, e.g., a CVD chamber, or a bypass line, and by requiring a controller capable of switching the valve between each of the two outputs. The comparable three-way valve in Gauthier, i.e., valve 174, is taught as having a different configuration, viz. two inputs and only one output.

The examiner alleges that the input 176 to Gauthier valve 174 is capable of functioning as an output when valves 160, 152 and 142 are closed. However, as appellants explain, the examiner has not established that Gauthier valve 174 is capable of functioning as claimed or, even if system line pressures were favorable, that the particular three-way valve taught by Gauthier could necessarily function as a two output-one input valve.

The requirements set forth in appellants' claims for a valve having a first output connected to a processing system and a second output connected to a bypass line, and for a controller capable of switching the valve between each of the two outputs, are certainly more than mere statements of intended use.

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Furthermore, King does not remedy the deficiencies of the primary reference since, like Gauthier, King appears to be limited to a system having three-way valves, each configured to have two inputs but only one output, and a controller to alternatively direct a feed stream or a purge fluid through the valves (which can be either fully open or fully closed) to a processing chamber, e.g., a powder form evaporator.

For the foregoing reasons, the decision of the examiner is reversed.

REVERSED

Marc L. Caroff
MARC L. CAROFF)
Administrative Patent Judge)

Jeffrey T. Smith
JEFFREY T. SMITH)
Administrative Patent Judge)
)
Beverly A. Pawlikowski
BEVERLY A. PAWLIKOWSKI)
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